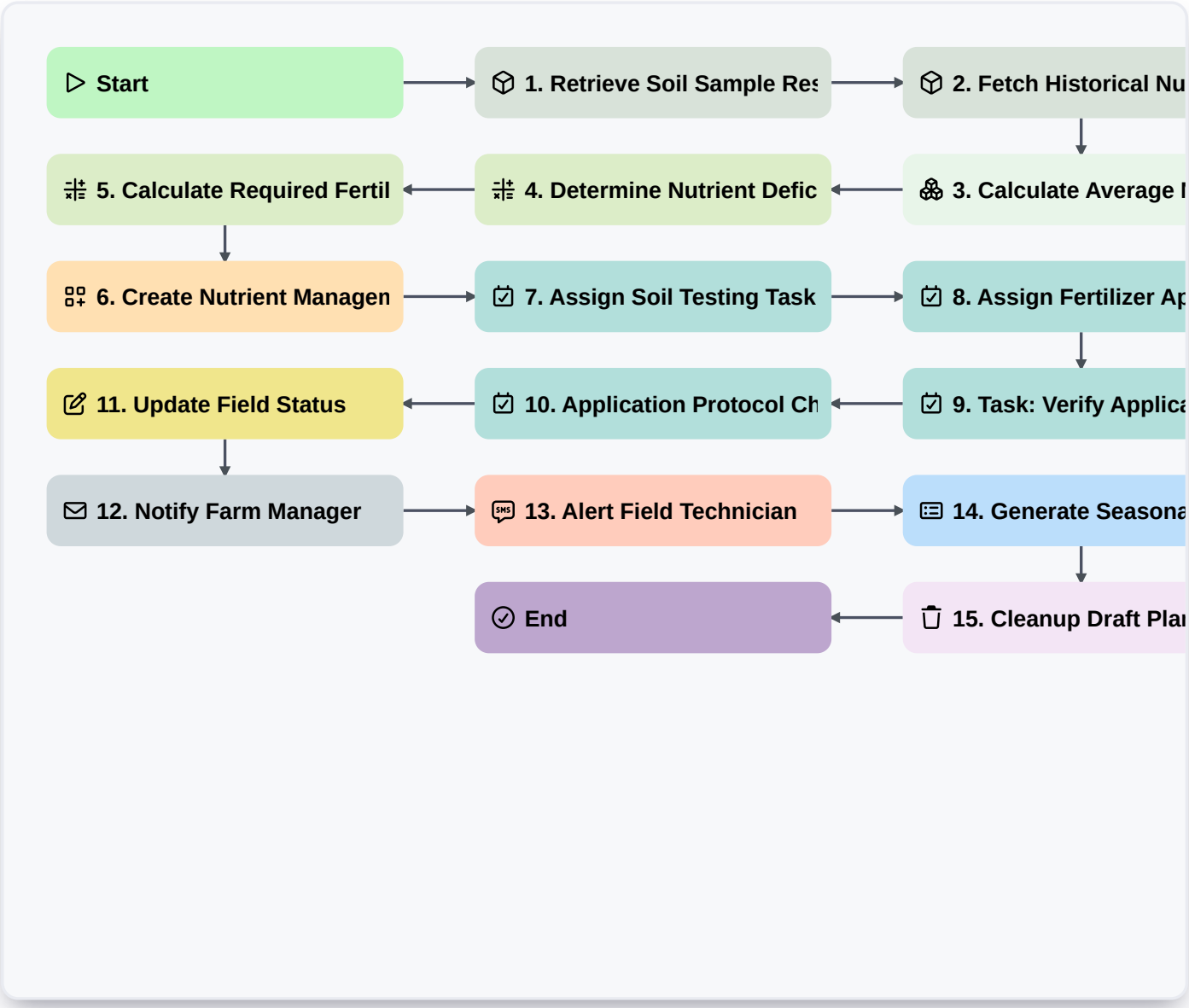
ChecklistGuro

Soil Health And Nutrient Management Process



Start
Start of the Workflow/Process.

1. Retrieve Soil Sample Results
Fetch existing soil test entries from the Soil Analysis data model for the specific field/plot.

2. Fetch Historical Nutrient Data
Retrieve previous season's nutrient levels to compare current levels against historical benchmarks.

3. Calculate Average Nutrient Levels
Calculate the average Nitrogen, Phosphorus, and Potassium (NPK) levels from all recent soil sample entries.

4. Determine Nutrient Deficit
Calculate the difference between the target nutrient level and the current average level found in the soil samples.

5. Calculate Required Fertilizer Volume
Calculate the total amount of fertilizer needed based on the nutrient deficit and the area of the field.

6. Create Nutrient Management Plan
Generate a new entry in the 'Management Plans' data model containing the calculated requirements and recommendations.

7. Assign Soil Testing Task
Create a task for the Field Technician to collect new soil samples if the existing data is outdated.

8. Assign Fertilizer Application Task
Create a task for the Farm Operator to apply the calculated amount of fertilizer to the designated plot.

9. Task: Verify Application
Create a follow-up task for a Supervisor to inspect the field after the application date.

10. Application Protocol Checklist
A set of sub-steps within the application task, such as 'Calibrate Sprayer', 'Check Weather Forecast', and 'Record Start Time'.

11. Update Field Status
Update the 'Field' data model entry to reflect that the nutrient management plan has been implemented.

12. Notify Farm Manager
Send an email to the Farm Manager containing the summary of the new Nutrient Management Plan.

13. Alert Field Technician
Send an SMS to the technician to notify them of a new soil sampling task assigned to them.

14. Generate Seasonal Soil Health Report
Generate a comprehensive PDF report summarizing soil trends, nutrient fluctuations, and application history.

15. Cleanup Draft Plans
Delete any incomplete or expired nutrient plan drafts from the data model to maintain data hygiene.

End
End of the Workflow/Process.